

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/007269

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.⁷ H01S5/183, 5/026, 5/04, 5/343, 5/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ H01S5/183, 5/026, 5/04, 5/343, 5/40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996
 Published unexamined utility model applications of Japan 1971-2005
 Registered utility model specifications of Japan 1996-2005
 Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, IEEE, Science Direct, JSTPlus (JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2004-103754 A (RICOH KK) 2004.04.02, 【0031】 - 【0173】 (no patent family)	1-12
A	T.Kndol et al, Electronics Letters, Vol.38, No.6, 2002, p.278-280, Fig.1	1-12
A	JP 2002-217491 A (CANON KK) 2004.04.02, 【0017】 - 【0059】 & US2002/094004 A1	1-12
A	JP 2000-261096 A (AGILENT TECHNOLOGIES INC) 2000.09.22, 【0023】 - 【0042】 & US6252896 A & EP 1037341 A2	1-12
A	JP 2003-283051 A (TOKYO SHIBAURA ELECTRIC CO) 2003.10.03, 【0020】 - 【0120】 (no patent family)	1-12

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search

20.06.2005

Date of mailing of the international search report

05.7.2005

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2001-358403 A (NIPPON TELEGRAPH & TELEPHONE) 2001.12.26, 【0018】 - 【0041】 (no patent family)	1-12
A	S. Riyopoulos, Applied Physics Letters, Vol.75, No.20, 1999, p.3057-3059, Fig.2	1-12